DOCUMENT RESUME

ED 464 584 HE 034 929

AUTHOR	Lisher, Scott M.
TITLE	A Descriptive History of the Discipline of Athletic Training Education.
PUB DATE	2002-05-01
NOTE	86p.; Master of Arts Thesis, Rowan University.
PUB TYPE	Dissertations/Theses - Masters Theses (042) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC04 Plus Postage.
DESCRIPTORS	*College Athletics; *Educational History; *Health Education; Higher Education; *Intellectual Disciplines; *Training
IDENTIFIERS	Athletic Trainers

ABSTRACT

The purpose of this paper is to trace the history of athletic training education as an academic discipline, showing how formal education has evolved for professionals in the field of athletic training. The roots of athletic training education can be traced to the mid-1950s. From that period, athletic training has changed immensely, and the field continues to change. The study explores the relationship between the development of higher education and the way athletic training has evolved as a discipline within higher education. Much of the focus is on change, not only changes made from the inception of the field as a discipline, but the possible changes in the future. Contemporary change theories are related to the development of the field. The development of athletic training as a discipline is in the context of changes that have brought higher education from a curriculum deeply rooted in the classics to one that is both more liberal and more practical. The rise in interest in college athletics was accompanied by the need for educated professionals to meet the needs of student athletes. (Contains 26 references.) (SLD)

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A Thesis

Submitted in partial fulfillment of the requirements of the Master of the Arts Degree
of
The Graduate School
at
Rowan University,
May 1, 2002

Approved by_____
Professor

Date Approved_____

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Scott M. Lisher
A DESCRIPTIVE HISTORY OF THE DISCIPLINE OF ATHLETIC TRAINING EDUCATION
2001/2002
Dr. Thomas C. Monahan, Advisor
Master of Arts in Higher Education - Administration

The purpose of this research is to trace the history of athletic training education as an athletic discipline. Through careful study and research, the author presents how formal education has evolved for professionals in the field of athletic training. The roots of athletic training education can be traced to the mid-1950's. From that period, athletic training education has changed immensely and is still changing today. This research explores the relationship between the development of higher education and the way athletic training evolved as a discipline within higher education. Much of the focus is on change, not only including changes made from the inception of athletic training education as a discipline, but also to possible changes in the future and where athletic training is headed.

MINI - ABSTRACT

Scott M. Lisher

A DESCRIPTIVE HISTORY OF THE DISCIPLINE OF ATHLETIC TRAINING EDUCATION

2001/2002

Dr. Thomas C. Monahan, Advisor

Master of Arts in Higher Education – Administration

This research describes the history of the discipline of athletic training education as it relates to American higher education. The history of American higher education, the development of intercollegiate athletics, and the emergence of athletic training are linked to facilitate the understanding of the development of the athletic training discipline within higher education. The author presents examples of contemporary change theories and relates these theories to the changes that brought American higher education and athletic training to where they are today.

ACKNOWLEDGMENTS

I would like to take this opportunity to thank my parents for all of the support and encouragement that you have given to me over the last two years. You have been there for me through it all and I would never have made it without you. This is for you!!!

I would also like to thank all of the faculty and staff at Rowan who have helped me reach this goal in my life. I would like to especially thank my advisor, Dr. Tom Monahan, for all of the support and guidance he has given me. Thanks for all of the time you spent in helping to make my thesis a success.

Lastly, a special thank you to Chuck Whedon, M.S., A.T.C./L., Coordinator of Sports Medicine Services at Rowan University. You have provided me with the opportunity to achieve this goal in my life. I have learned a great deal from you in the last two years and will take that with me into the next stage of my career. I greatly appreciate everything you have done for me.

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Chapter 1

INTRODUCTION

The history of higher education is an intriguing topic to study. Exploring its history enables us to see how higher education has developed and become so important. What originated as education deeply rooted in religion and only available to the wealthy has expanded immensely. Higher education initially prepared students "with the purpose of perpetuating the prevailing religions" (Westmeyer, 1997, p.171) as well as for service as civic leaders. With the changing times and the vision and leadership of prominent individuals, higher education essentially transformed its classical curriculum into a more practical model, although it remained deeply rooted in the traditional liberal arts and sciences.

Higher education began to take on a more practical aspect in the mid-1800's. In 19th century America, there had been only limited acceptance of "professions", such as divinity, law, and medicine. Any other pursuit was considered a vocation. Apprenticeships were the principal means for learning in the vocations. "Not till the nineteenth century was education for the professions to be had to any considerable extent in formal schools" (Brubacher & Rudy, as cited in Goodchild & Weschler, 1989, p.379). Due to the increased number of professors who were educated in the German universities, a trend began to emerge in American higher education. German universities trained in areas other than religion. They focused more on professional, practical education. With the growth of the agricultural and mechanical (A&M) institutions, as well as the land-

grant institutions, higher education began to focus on its new responsibility of preparing people for the professions. Visionary institutions realized the need to serve the people and provide them with an education for practical purposes. "Eventually the American university became a collection of professional schools which could include law and medicine, (theology came to be of lesser concern), but also education, business, forestry, journalism, veterinary medicine, social work, and many others"(Westmeyer, 1997, p.99).

The transformation from the classical model to the more liberal, practical model in higher education was not the only change that took place in higher education. Intercollegiate athletics also became popular in many institutions of higher learning. With the first intercollegiate athletic contest in 1869, there grew a need for the development of ancillary services to support athletics as a part of higher education. The athletic trainer was seen as one of these support services.

Athletic training traces its roots to 1881, when James Robinson was hired by Harvard University as the athletic trainer (Ebel, 1999). Prior to that, the treatment of athletic injuries was handled by the coach or team physician and not by an athletic trainer. In most instances the athletic trainer also coached one or more athletic teams. Athletic training of yesteryear was nothing like it is today.

The history of athletic training education as an academic discipline can be traced to the mid-1950's and is closely related to the history and development of the National Athletic Trainers' Association (NATA) (Delforge & Behnke, 1999). Prior to the founding of the NATA in 1950, novices were taught and learned basic skills primarily via a series of traveling workshops. As noted by O'Shea (1980)(as cited in Delforge & Behnke, p.53), the NATA was founded with a mission to " build and strengthen the

profession of athletic training through the exchange of ideas, knowledge, and methods of athletic training." This mission provided the framework from which athletic training education would rise. This mission statement also links to higher education. Colleges and universities were organized for free and open communication and exchange of ideas and knowledge. Higher education would come to be the formal training ground where future professionals were trained to enter the developing field of athletic training. And so, with the founding of the NATA, athletic training education began to develop. "…[A]thletic training education has continually benefited from the vision, wisdom, and nurturing of numerous NATA members"(Delforge & Behnke, 1999, p. 53). As Delforge and Behnke state, "from this modest beginning, athletic training education can be traced through 50 years of change, maturity, and emergence as a highly regarded avenue for the preparation of sports health care professionals"(p.53). The road that athletic training education has taken in higher education is a significant one for the field. It has led to better-trained professionals and contributed to the professionalization of the field. However, there are some key links between the history of higher education and how the discipline of athletic training evolved within higher education. Both of these areas have previously been researched separately but, there has been no attempt to link the two together.

The following questions helped to guide this research:

1. What is the conceptual root for the preparation of professionals within higher education?

2. How did athletic training as an academic discipline actually develop and progress to where it is today?

3. How is contemporary change theory evidenced in the history of higher education and the evolution of athletic training as an academic discipline?

4. What are the issues that impinge on the growth and development of athletic training as an academic discipline?

5. What is the future of athletic training education in higher education?

Undergraduate athletic training education programs have been initiated at many colleges and universities over the past decade. Numerous changes in athletic training education have been made that facilitated the increase in the number of athletic training education programs. One change that has been made was to eliminate the internship route to achieve certification. Effective in 2004, the only way for a student to be eligible to sit for the national certification exam is by having graduated from an accredited athletic training education program. The elimination of the internship route creates more opportunities for future professionals to become better prepared for entry into the field. The preparation of professionals for the field of athletic training will be completely in the hands of educators in higher education institutions by the year 2004.

In the following chapters, the history of athletic training education as an academic discipline is explored to enhance the understanding of the relationship of higher education and the professionalism of the athletic training field. Concurrently, how both American higher education and its curricula and curricular foci have changed is explored in the light of contemporary change theory.

Before a discussion of the evolution of the discipline of athletic training and its history as a discipline is undertaken, however, a basic foundation must be provided for the historical developments in higher education, including higher education's role in

preparing people for the professions and the emergence of intercollegiate athletics in higher education. This historical background provides the conceptual framework that enables the reader to understand how athletic training has evolved in the context of higher education. The path that brought the discipline of athletic training into existence within higher education will become evident as the discussion evolves.

Chapter 2

REVIEW OF THE LITERATURE

In order for an effective discussion of the history of the discipline of athletic training in higher education to take place, it is essential that a brief overview of the changes that have occurred is presented.

The discussion begins with a presentation of the earliest years of higher education beginning with the founding of Harvard in 1636. As higher education in America expanded in the eighteenth and nineteenth centuries, new trends in higher education began to emerge. The Dartmouth College Case of 1819 and the Morrill Act of 1862 were stimulants for the expansion of higher education and professional preparation, respectively. The Cornell Plan and the Wisconsin Idea occurred at land grant institutions that expanded higher education for the masses and defined higher education's role of preparing people for the professions. Concurrently, as higher education was expanding, intercollegiate athletics began to emerge at colleges and universities. With the growing popularity of sports among students, a need arose for institutions to have an athletic trainer to treat athletic injuries. The discussion continues by discussing the preparation of the athletic trainer and how higher education came to play such an important role in the preparation for the athletic training profession.

The Earliest Years of Higher Education

Higher education has a long history that can be traced to the colonial era. The earliest American colleges were heavily influenced by the Europeans and were sectarian in nature.

> The Pilgrims had planned to open a school because they believed strongly that it was the duty of every man to learn to read the Scriptures for the glory of God. Numbers (small) and lack of financial stability prevented them from actually beginning the school. However, by 1636, there were enough settlers in the Boston area and the finances of the region were stable enough that Harvard College could be opened. (Westmeyer, 1997, p.6-7)

Yale was later founded in 1662 under the same Puritan influence by minister Thomas Hooker. These colonial colleges were just the beginning of higher education in America.

From the beginning, higher education was intended for the elite class. It was fashioned upon the medieval guild system, in which students who wished to be educated studied under a master, and the entrance into the professions was by apprenticeship. "The professional candidate placed himself under an able and mature minister, lawyer, or doctor and hoped by observation and imitation to be admitted subsequently to professional status" (Brubacher & Rudy, as cited in Goodchild & Weschler, 1989, p.379).

Colleges were essentially residential facilities that consisted of a building that was inhabited by young men who desired to become educated by a professor or master. Because many of these colleges were private and without the types of endowments enjoyed by Harvard and Yale, the local citizenry supported these institutions through their own, sometimes meager, financial resources.

The main objective of colleges of this time was to prepare ministers who would perpetuate the religions. "To be more specific, the desire of important religious denominations (such as the Anglican and Calvinist) for a literate, college-trained clergy was probably the most important single factor explaining the founding of the colonial colleges" (Brubacher & Rudy, 1976, p.6). Not only were the colleges responsible for training ministers, they were also responsible for educating professional men to become the civic leaders of the community. Rudolph (1971) has written, "Of course a religious commonwealth required an educated clergy, but it also needed leaders disciplined by knowledge and learning, it needed followers disciplined by leaders, it needed order. For these purposes Harvard was absolutely essential" (p. 7). The country at the time was young and had no education system for the public. The desire of the Puritans to perpetuate their beliefs and have an educated ministry began the great tradition of higher education that this country now has today (Westmeyer, 1997).

In the first colonial college, the curriculum was very basic. "The program of study included: reading the Old Testament from Hebrew into Greek, being instructed in Hebrew, being 'led through' all the liberal arts, and participating in weekly declamations and disputations" (Westmeyer, 1997, p.9). The student would essentially read, interpret and memorize the information that was furnished to him by his master. When the four years of study concluded, and the student had been examined in the languages and science, he was awarded the degree of bachelor. After three more years of continued study beyond the bachelor's level, the student could be granted the master of arts degree.

As the country moved into the eighteenth century and expanded, so too did the variety of religions. While the frontier moved westward, American's interest in religious

diversity grew. The Puritan religion was no longer the major religious faith. "One element in the new educational activity of the states was a public hostility to denominational education" (Rudolph, 1971, p. 36). Other religious groups soon began to find their way into the education system due to this religious indifference and competition. William and Mary, founded in 1693, was Anglican. "This new college was to provide a supply of clergymen and from such men it was expected that the colony would draw its public servants" (Rudolph, 1961, p.5). The College of New Jersey at Princeton was founded in 1746 as a Presbyterian seminary. Princeton, as the College of New Jersey would come to be known was, however, the first school to break with the secular tradition of the earlier colleges, and it became the first institution to admit students of any religious faith. It promised that it would not be so much of a Presbyterian seminary as it would be a school for statesmen (Rudolph, 1971). The main purpose of the college was "primarily designed to produce ministers with a 'new light' point of view" (Brubacher & Rudy, 1976, p.8). As time passed, the colonial colleges would expand on Princeton's liberal nature.

King's College, which would later be known as Columbia University, was founded in 1754 as a sectarian (Anglican) school. The curriculum at Columbia included surveying, navigation, husbandry, mineralogy, geography, commerce, and government. These subjects were hardly sectarian.

The College of Philadelphia, later the University of Pennsylvania, was the first non-church college to be founded (1755). Unlike the other previous colonial colleges that were centered around Christianity, the College of Philadelphia was unique. Benjamin Franklin, a founder of the college and a Quaker, offered in his *Proposals*

Relating to the Education of Youth in Pennsylvania (1746), a more utilitarian college that would serve the needs of American society. Seven years later, William Smith from Scotland, took Franklin's ideas, expanded upon them, and published them in 1753 (Rudolph, 1971, p.17). In Smith's pamphlet, *A General Idea of the College of Mirania,* he offered his ideas:

> - two 'courses'- the traditional classical one and a second course for the mechanics profession,
> - all instruction to be given in English,
> - the inclusion in both courses of science, surveying, history, agriculture, English, writing, speech, and contemporary politics. (Westmeyer, 1997, p. 14)

"The College of Rhode Island was instituted in 1764 to raise the educational standards of Baptist ministers" (Brubacher & Rudy, 1967, p.8), and would later become Brown University. In 1770, the Dutch Reformed Church founded Queens College in New Brunswick, New Jersey, "for the education of youth in the learned languages, liberal and useful arts and sciences, and especially in divinity, preparing them for the ministry and other good offices" (Brubacher & Rudy, p.8).

The curriculum in the earliest years was based on what was known as the trivium. The trivium consisted of grammar, rhetoric, and logic and was based on the scripture and literature. Latin was the language of the Reformation, and Greek was the language of the Renaissance. The founders of the colonial colleges thought that the lyrics and teachings of Greek and Latin literature produced the educated man. Greek and Latin became the two fundamental languages and literatures of the colonial colleges. The belief at the time

was that the truth is fixed in the literature and is immutable. The mind was to be trained like a muscle. This notion was thought to be the only way to educate the people of the time. Rudolph (1971), in his discussion of the classical curriculum wrote, "the fundamental discipline was Latin-the language of the law, of the church, of medicine; the language through which translations of Aristotle from the Greek had dominated the medieval course of study" (p. 25).

The quadrivium (geometry, arithmetic, music, and astronomy) brought the ideas of science and discovery into the curriculum and together the trivium and quadrivium were an important part of the earliest colleges. It was the belief that the only way for the colleges to achieve their ultimate goal of preparing those individuals for law and medicine was by utilizing these classic areas of knowledge. "The utility of a knowledge of the classics for the practice of the professions of law, medicine, and theology was taken for granted by all in the seventeenth and eighteenth centuries, ..."(Brubacher & Rudy, 1967, p.13).

Nine colonial colleges were founded prior to the Revolutionary War. After the Revolutionary War, seven more colleges were added. Although these educational institutions were heavily influenced by the English and, in most cases, were sectarian in nature, the colonial colleges provided the seed of growth for higher education in America. This growth was driven by changes that were sweeping the colonies and beginning to spread westward. Preparing clergy and civic leaders was no longer the primary objective of the colleges; people yearned for the practical skills necessary to develop a fledgling nation and society. The movement to create a liberal form of higher education was underway.

A good indicator of the changing intellectual climate was the decreasing emphasis on educating men and training them for the ministry. At Harvard in the mid-seventeenth century, it was noted that President Dunster even tried to obtain texts so that professionals might be trained in law and medicine (Brubacher & Rudy, 1967, p.9). As Brubacher and Rudy further note,

> The whole pattern of occupational specialization in the colleges tended to show an ever smaller percentage of students going into the ministry as the colonial period wore on. The percentage of college graduates going into the ministry was 50 during the first half of the eighteenth century. By 1761, however, this had fallen to 37 percent, and by 1801 to 22 percent. (p.10)

The American educational system began with strong influences from the Europeans in terms of sectarian orientation. Religion would not be the only influence that the Europeans had on American higher education. The curricular developments that took place in Europe at the time quickly became integrated in American colleges and universities. As Brubacher and Rudy (1976) note, Scottish universities played a role in the spread of new science in American colleges. English dissenters, who did not conform to the beliefs of the Church of England, set up their own academies. The curriculum at these dissenting academies was much broader. It was utilitarian in nature and also included the classics. The influences in the curriculum from the dissenting academies, as well as individuals such as William Smith, who would later provide the leadership at the University of Pennsylvania, helped to plant the seeds for change in American higher education.

By the mid-1800's, the classic higher education model that had developed with the formation of the early colonial colleges was beginning to be seriously challenged. While the leaders of higher education continued to see the classics as important, they also began to see the need for higher education to serve the practical needs of the westward-moving frontier. Although many colleges were still secular in nature, they were quickly moving away from the classical model and were taking on a decidedly liberal expression. As Rudolph (1971) notes, "the [classical] curriculum was not of the sort that appealed to men of practical inclination" (p.20); and, moreover, "[W]hile exerting a profound influence on such an environment through the civil and religious leaders it trained, the colonial college failed to establish itself as a popular institution intimately affecting the lives of the people" (Rudolph, p. 19).

Expansion

Colleges and universities expanded greatly following the ratification of the Constitution of the United States of America in 1787.

The Dartmouth College Case of 1819 was one event that spurred the rapid growth of colleges in America. Dartmouth College was founded by Eleazor Wheelock, who was a Congregationalist. Wheelock obtained a royal charter from England that provided for a self-perpetuating board of trustees and for a president who was to appoint his own successor (Westmeyer, 1997, p.15). Eleazor Wheelock appointed, as his successor, his son John, who did not agree totally with the Congregationalist teachings. Due to his disputes over various teachings, the board of trustees removed him from his presidency and from the board itself. John Wheelock obtained the support of the Republican Party, and the new republican governor of New Hampshire during his public appeals. The

legislature passed a law changing Dartmouth College to Dartmouth University and bringing it under the control of the state. The board of trustees brought the case to court. "The basic question in the case was whether the school was a public or private corporation" (Westmeyer, 1997, p.16). The case, which was ultimately decided by the United States Supreme Court, essentially found that Dartmouth College was a private institution and that private institutions could be governed without state influence. The high court did not rule that state or federal control of an educational institution was improper; however, "[t]he court decision in this case apparently delayed the founding of state universities for some 50 years" (Westmeyer, 1997, p.17).

The Dartmouth College case created new opportunities for the founding of new and diverse institutions during the remainder of the nineteenth century. Various types of institutions arose in almost every part of the land. "This multiplication and diversification of colleges, seen in perspective, was but part of a larger movement for diffusion of knowledge to the people" (Brubacher & Rudy, 1967, p.59). The expansion was on. The movement for technological and scientific education, which had begun earlier, spawned new and more popular colleges and institutes (Rudolph, 1971).

> Not only did the sheer numbers of American colleges increase markedly during the nineteenth century, but many new types of colleges, dedicated to special purposes, made their appearance. Among these none was more closely attuned to the utilitarian spirit of the booming republic than the technical college or institute. (Brubacher & Rudy, 1967, p.61)

"The age of science and industrialization had arrived, and the United States was quick to recognize the implications for higher education" (Henderson & Henderson, 1974, p.2).

There were other significant events that spurred the expansion and diversification of colleges and universities. A brief discussion of early American higher education would be incomplete without mentioning Thomas Jefferson and the founding of the University of Virginia.

Originally chartered in 1816 as Central College, "[t]he opening of the University of Virginia is generally ascribed to 1825" (Westmeyer, 1997, p.25). Thomas Jefferson was a powerful leader who founded the first university that was actually controlled by the state. The school supported by the state was to "in all things and at all times be subject to the control of the legislature" (Westmeyer, p.25).

Jefferson, who earlier served as governor of the state and on the College of William and Mary's board of visitors, began to develop his ideas for American higher education before he even founded the University of Virginia. At William and Mary, Jefferson "attempted to reorganize the entire course of study, hoping to bring it fully into line with the future" (Rudolph, 1970, p.40). "The college, said Jefferson, must free men from superstition, not inoculate them with it" (Rudolph, p.41). He proposed the establishment of various professorships, "revealing as he did so the new emphasis on utility which would characterize the American college curriculum. Everywhere Jefferson proposed to bring the curriculum within the range of the practical and the public" (Rudolph, p. 41). Although the legislature did not enact Jefferson's proposals at William and Mary, his plans fully developed at the University of Virginia.

"The curriculum was to include English, mathematics, government, agriculture and commerce, science, and 'reasoning and reflection'"(Westmeyer, 1997, p.26).

> He [Jefferson] divided the institution into eight schools, each headed by a professor, each offering its own diploma, but no degree, to students, who could travel freely from one school to another. (Horowitz, 1987, p.69)

Jefferson's intention in the founding of the University of Virginia was to open the first true university. Although the term university was in use by institutions founded prior to the founding of the University of Virginia, they were not universities by any means. The founding of the University of Virginia was not the founding of the first true university as Jefferson hoped for. Instead, the founding of the University of Virginia laid the foundation for multiple "colleges", research expectations of professors, and the possibility of graduate study. (Westmeyer, 1997, p. 27) Although it laid the foundation for the true university, Westmeyer states, "In actual practice, it is doubtful that Virginia was truly a university until after the Civil War" (p.27). Jefferson's Virginia continued the trend of the evolving practical aspect of education in America.

Rensselear Polytechnic Institute (RPI) was founded in 1824. "Stephen Van Rensselear wished his 'School of Theoretical and Practical Science' to prepare teachers who would instruct the sons and daughters of local farmers and mechanics in the art of applying science to husbandry, manufactures, and domestic economy" (Brubacher & Rudy, 1967, p.61). RPI added what might be thought of as a university extension by offering evening classes and branch schools. To go along with RPI's agricultural focus, civil engineering was also added to the curriculum.

Harvard, Yale, Dartmouth, Brown, and the University of Pennsylvania all followed RPI by adding technical programs to their schools. Harvard added the Lawrence

Scientific School in 1847. The Sheffield Scientific School was founded at Yale in the same year. In 1851, the Chandler Scientific School was established at Dartmouth. Brown added a department of practical science in 1852, and the University of Pennsylvania followed by creating a department of mines, arts, and manufacturers three years later (Brubacher & Rudy, 1967, p. 61-62).

As the frontier continued to move rapidly westward and as many of the established universities of New England and the east were broadening their curricula, a major force that would forever change the face of American higher education was beginning to take shape. During the first half of the nineteenth century, Congress was pressed by various interest groups to set up agricultural schools and other institutions of higher learning. Previous attempts to establish a national university and agricultural colleges in some states had failed, which spurred the notion that federal funds were needed for this type of endeavor. The use of public land was also suggested as another support base. The federal government would begin to intervene, responding to the call for help, and meaningfully begin to help shape American higher education.

Justin Morrill was a Congressman from Vermont. Morrill saw that there was a need for new training and new preparation for the new age. In particular he saw that the agricultural and mechanic arts lacked the appropriate technical training that was needed. He drafted legislation proposing Federal land grant colleges and offered it to Congress. In 1859, the original Morrill bill was proposed to President Buchanan, which he vetoed. It is speculated that President Buchanan vetoed the bill because it was opposed by the South who saw it as a strengthening of the artisan and labor classes of the North. The West also opposed the bill because they wanted "no fancy farmers and no fancy

mechanics" (Westmeyer, 1997, p. 58). Morrill's purpose in his initial effort was "to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life" (Rudolph, 1971, p.249). In this same year, after Buchanan vetoed the bill, Charles Darwin's *The Origin of Species* appeared. Darwin's work was the motivating factor that led the western world into a new era of free inquiry, one of more extensive scientific research. "The movement for land-grant colleges represented the American phase of this new emphasis on the role of science in human affairs"(Brubacher & Rudy, 1967, p.62). As Brubacher and Rudy further explain,

> There was a good deal of dissatisfaction in the second quarter of the nineteenth century with the traditional liberal-arts college in America. President Wayland of Brown asserted in 1850 that the United States had 120 colleges, 47 law schools, 42 theological seminaries, and yet not a single institution 'designed to furnish the agriculturalist, the manufacturer, the mechanic, or the merchant with the education that will prepare him for the profession to which his life is to be devoted.' As late as 1862, there were only six 'higher' schools in the whole country purporting to deal with these utilitarian fields. (p. 62)

Agriculture was becoming more organized and, with the influence of science, there became a fundamental need for practical and technical training. The changing times required new competencies for the American farmer and mechanic. "The real business of the country was agriculture and other frontier activities were also of great importance, rather than industry and commerce" (Westmeyer, 1997,p.25). It was becoming more important for the university to serve the needs of the state and the whole country. In

1862, Justin Morrill re-introduced a bill to Congress, which was finally approved and signed by President Lincoln in 1862.

The Morrill Act of 1862 provided:

1. support in every state for at least one college devoted to agriculture and the mechanical arts,
2. public lands or land scrip equal to 30,000 acres for each senator and representative under the 1860 appointment (a total of 17,430,000 acres of public land),
3. the funds, except for 10 percent which could be used initially to buy land for sites, to be set up as an endowment at no less than 5 percent interest,
4. if not used the funds to be returned to the federal government in five years. (Westmeyer, 1997, p.61)

"The Morrill Act of 1862 played an important part in stimulating the growth of technical education" (Brubacher & Rudy, 1967, p.62), and this landmark legislation provided the much-needed financial impetus to change American higher education.

> As the frontier of civilization moved westward, each of the states initiated a public university as the capstone of its public school system. The federally encouraged colleges of agriculture and mechanic arts, … gave impetus to research, to occupational training, and to types of extension education that had been frowned on by the universities of Europe. (Henderson & Henderson, 1974, p.2)

Agricultural education was now openly available to farmers, yet many farmers were skeptical of the experts. They felt experience was the best teacher. The children of farmers, who were attending the land grant institutions, seemed to be motivated by the American ambition to be successful. They were going to the cities where the opportunities for industry were. For work in industry, agricultural courses were of little importance; however, engineering or mechanical classes were a necessity. "The threshold of opportunity in America had shifted from the land to the factory; in combining the agricultural with the mechanical, the land-grant colleges were uniting the past and the future, two schemes of life" (Rudolph, 1971, p.258).

By 1961, there were 69 American colleges that were supported by the Morrill Acts. The land-grant colleges (A&M's-as they were to become popularly known) were additionally supported by subsequent legislative bills, including: the Hatch Act of 1887, the Second Morrill Act of 1890, the Nelson Amendments to the Morrill Acts of 1862 and 1890(1907), the Smith-Lever Act of 1914, the Smith-Hughes Act of 1917, and the Bankhead-Jones Act of 1935. These acts helped to ensure that the land-grant institutions developed into what they were intended to do, that is, to serve the people's needs through education and research. Furthermore, they were founded to prepare people for practical professions vital to the continuing progress of a burgeoning nation.

Vocational and technical education had become a legitimate function of American higher education, and everywhere the idea of going to college was being liberated from the classical-bound traditions that had defined the American collegiate experience for so long (Rudolph, 1971).

The Cornell Plan

Cornell University was founded in 1865 by Ezra Cornell (the chairman of the New York senate on agriculture) and Andrew White (the chairman of the New York senate on education). Together, the two men developed the "Cornell Plan", which proved to help influence other university curricula (Westmeyer, 1997). The idea behind the curriculum was that the university, as a land-grant institution, would provide its students with educational training in science, technology, and military studies. The two men devised a plan to take the teachings of the great European schools and combine them into the New World education system (Westmeyer, 1997).

The Cornell Plan created an encompassing curriculum for a wide variety of students. It essentially united practical and liberal education (Rudolph, 1971). Further, according to Westmeyer (1997), it included an all-purpose curriculum, equality among subjects, scientific research, service to society, and openness to all classes of students. The plan created a full-blown experiment in new education, providing new courses for students to gain a new knowledge of the world. Further, it became so important that it advanced a movement to expand education throughout the country. Cornell's program deviated from the classical curriculum; therefore, influencing other universities to begin to adopt a new model to help formulate successful education. For example, the University of Minnesota and the University of Wisconsin adapted the Cornell Plan by taking the structure of the plan and implementing it into their respective institutions (Westmeyer, 1997). Even when Ezra Cornell was criticized by the public for his handling of endowments, Cornell University withstood those negative criticisms by

receiving more endowments and gifts from benefactors to keep the educational advancement thriving (Westmeyer, 1997).

The Cornell Plan advanced education for the masses and was an instrumental factor in the progress of the New World teachings. Andrew White once said, "my main aim has been to fit myself to help in founding and building a worthy American University" (Rudolph, 1961, p.266), and Ezra Cornell had publicly stated, " I would found an institution in which any person could find instruction on any subject" (Westmeyer, 1997, p. 66). Cornell's statements would come to fruition, and with the founding of Cornell University, Cornell and White had created an institution and programs that gave ample opportunity to the public to become educated in a desired field. Moreover, they helped to create an educational atmosphere that provided a stepping-stone for the advancement of higher education in America.

The Wisconsin Idea

The University of Wisconsin was founded in 1848 as a non-denominational theological seminary (Westmeyer, 1997, p.74). After the end of the Civil War and with the passage of the Morrill Acts, state universities began to grow. It was because of the Morrill Acts and the conception of the land-grant institutions that the University of Wisconsin grew and improved dramatically. This was the era of the Progressive Movement that was very prominent in the state of Wisconsin. The objective of this movement was to "purify life by creating middle-class morale, protecting the weak and controlling big business" (Westmeyer, 1997, p.75). The events of the Progressive Movement were critical to the development and success of the Wisconsin Idea.

The Wisconsin Idea was led by the governor of Wisconsin, Robert LaFollette. LaFollette began to develop this idea in 1900 and, in 1904, he got Charles VanHise appointed as the president of the university. VanHise helped LaFollette implement the Wisconsin Idea. Both of these men were progressivists, and they believed that the university and the state should work hand-in-hand with one another. This idea was more or less, "a program of university service"(Rudolph, 1961, p. 363). The Wisconsin Idea was based on the notion "that informed intelligence, when applied to the problems of modern society, could make democracy work more efficiently" (Rudolph, p. 363). Many of the ideas that LaFollette and VanHise had for Wisconsin were shared by Henry Tappan at the University of Michigan and by Andrew White at Cornell. Unfortunately, these men were unable to accomplish what LaFollette and VanHise did at the University of Wisconsin.

Why was there such support for the Wisconsin Idea? There was, at the time, a new concern for the practical aspect of the college curriculum. The people of the state wanted something new and different, something that was responsive to their needs. There was also a greater appreciation of the university-trained expert and university professor. This was due to the fact that the frontier was moving westward as well as to the influence of the many German and Scandinavian immigrants who had moved from New England to Wisconsin (Brubacher & Rudy, 1997, p.165). At the time of the Wisconsin Idea, there was considerable contrast in the attitudes many people had toward education. Because large numbers of settlers were German and Scandinavian immigrants (Scandinavians were also very progressive), there was great respect for the learning traditions of the German universities and for the role of education as a whole. This

attitude toward education by the people of Wisconsin helped to create the environment that was needed for the Wisconsin Idea to be implemented. The local economic conditions were favorable for the expansion of the university. The states' economy was centered around agriculture and had recently shifted from wheat growing to dairy (Westmeyer, 1997, p.75). With this shift came the need for efficient business management and technical knowledge for success (Brubacher & Rudy, p.165). There was also a need to provide for the public. This would be achieved by servicing the needs of the state and by extending the educational benefits to more of the community.

The Wisconsin Idea is important for many reasons, not the least of which is that it placed the peoples' university at the service of the people. The University of Wisconsin served the state by applying its research to solve public problems. The research that was completed had to be applied to the improvement of lives, and that it did. "The 'Babcock Fat Test', [was one example that] saved hundreds of millions of dollars in the state's dairy industry" (Westmeyer, 1997, p. 75). The university also trained experts in the physical and social sciences. The Wisconsin Idea created a close relationship between the university and the state. The state placed university professors on state commissions in their area of expertise. Political scientists drafted legislation, and engineers helped plan road building programs. By 1910, there were 35 professors serving on non-political commissions in Wisconsin. The Saturday Lunch Club was even started in Madison. Here, professors and state officials could exchange views on current issues informally. The university extended itself to all the people within the state by offering extension programs, particularly in agriculture. It set up a Bureau of General Welfare to answer questions about everything ranging from education, sociology, and government, but it

mainly answered questions about agriculture. The university opened its labs for the testing of soils and fuels so that industry and agriculture could be improved. The Wisconsin Idea made the state of Wisconsin its campus (Westmeyer, 1997, p. 75).

The Wisconsin Idea is significant in the history of American higher education insofar as it, "truly pioneered the merging of higher education with public life" (Goodchild, 1989, p. 234). It also created a more prosperous and progressive economy and community. The people saw the university as a good investment because it provided educational services directly to them (Brubacher & Rudy, 1997, p.165). The return that the people saw created a broad basis of popular support for public higher education. Furthermore, it served as a model for other states to follow in that it was a university responding directly to the needs of the community it served.

> Thus, in the decades following the Civil War, a new conception of the university emerged that was uniquely American and uniquely suited to the demands of a vigorous, changing, and expanding society. The 'new university' would have a strong career orientation in its teaching, and it would extend and disseminate knowledge as widely and effectively as possible to collective as well as individual users. Both instruction and extension were to involve the application of research and scholarship. The mutually reinforcing relationship of all these components is the basic American tradition for our public universities. According to Ashby (as cited in Lynton & Elman, 1987), 'the great American contribution to higher education has been to dismantle the walls around the campus. When President VanHise of Wisconsin said that the borders of the campus are the boundaries of

the state, he put into words one of the rare innovations in the evolution of universities'. (p.7)

A New Focus for Higher Education

Prior to the inception of the land-grant institutions, the Cornell Plan, and the Wisconsin Idea, American higher education failed to connect education with the development of the nation. When higher education assumed the responsibility of providing formal professional education, colleges and universities entered the life of the people. The expanding society now made no distinction between what was learned on the job or in the university. Higher education would offer itself as the setting for formal instruction and preparation for all careers for which some formal body of knowledge existed. Although career preparation was nothing new, there had been a large increase in the number of careers for which formal study and instruction was possible, useful, and demanded. All careers were seen as equal and demanded equal opportunity within the university. American higher education was largely responsible for recognizing and nurturing new professional interests and turned what were once vocations into professions.

Intercollegiate Athletics in Higher Education

The role of intercollegiate athletics in higher education is very significant and its roots can be traced back to the 1800's. "There was nothing sudden about the development of organized athletics" (Rudolph, 1961, p. 150). In the late 1700's at Princeton, faculty forbade students to play strenuous games of shinny, a kind of hockey, on the grounds that it, "is in itself low and unbecoming gentlemen and scholars, and is

attended with great danger to the health" (Rudolph, p. 150). The view then was that athletics had no place in higher education and distracted young men from scholarship.

Intercollegiate athletics had begun in the early nineteenth century at English universities and subsequently spread to the elite universities of the northeastern United States. The impetus for this new endeavor arose from a complex interaction of social, cultural and economic factors (Levinson & Christensen, 1996). During this time period, students established informal clubs that sponsored intramural competitions in crew, soccer, track and field, and bat and ball games. Intercollegiate athletic competition emerged when these student athletic clubs began to schedule matches against their counterparts at other colleges. Crew was the first intercollegiate sport on both sides of the Atlantic Ocean. Oxford and Cambridge staged the first intercollegiate rowing competition at Henley in 1829. Students in the American northeast showed their strong cultural affinity for the English upper class by forming rowing clubs in the 1830's. The rowing clubs at Harvard and Yale later staged the first American intercollegiate athletic competition in New Hampshire in 1852. The Ivy League schools continued the trend of rowing competitions over the next few years.

When the Civil War began, it halted intercollegiate competition for a time, but it quickly emerged again after the war ended. Crew was still the most popular sport. Intercollegiate baseball began before the Civil War but never grew popular until the postbellum years. "On July 1, 1859, Amherst and Williams played the first intercollegiate baseball game in Pittsfield, Massachusetts. Within ten years, baseball had moved into every section of the country" (Levinson & Christensen, 1996, p. 506).

In 1857, Thomas Hughes' novel, *Tom Brown's School Days*, brought about an understanding that competitive sports were, "a means to enhance the spiritual and moral development of young men" (Horowitz, 1987, p. 131). This helped to transform American higher education in the mid- to late nineteenth century. Students were finding that colleges and universities were not only the places that trained them in theology, moral philosophy, and the classics; they were also places for students to be professionally trained and to enjoy new levels of freedom, which included participation in intercollegiate athletics.

In the latter decades of the nineteenth century, football began to emerge as a popular intercollegiate sport. "The first intercollegiate [football] game was played in November of 1869 between Princeton and Rutgers in New Brunswick, New Jersey" (Levinson & Christensen, 1996, p. 507), under rules similar to soccer. Early football, like all other intercollegiate sports, had been run by students. There was no control from the administration. The Intercollegiate Football Association (IFA) was developed in 1876 by students from Harvard, Yale, Princeton, and Columbia to regulate the sport. However, it was not until rule changes adopted between 1876 and 1882 that the American game of football come into play. By the mid-1880's, football had become more popular than crew because of the more competitive spirit associated with it. It was during this time that people began to compare the battles in the game of football to those of the Civil War. Many felt the game was too violent for the student athlete.

> Others felt that the set plays, intricate teamwork, and division of labor by position created by the new rules were hailed as a reflection of the form and function of the modern industrial corporation. Football's proponents saw the gridiron as a

> training ground for the young men being groomed to fill top management positions in the increasingly complex world of American business. (Levinson & Christensen, 1996, p. 507-508)

Football was now being seen as both *manly* and *scientific*.

Yale began to establish the prototypical, big-time intercollegiate athletic program under the direction of Walter Camp around 1880. It was there, at Yale, that the system of selecting, training, and supervising the team originated. Camp brought in large revenues and strong support by the people. The administration realized how successful Camp had been and began to attempt to take control of intercollegiate athletics.

Even though football became increasingly commercialized during this time, American universities attempted to maintain the amateurism of the English. "Ringers" and " tramp athletes" began going from school to school playing for whomever would pay them the most. Thus, scandals arose and began to tarnish the image of intercollegiate sports in the 1890's with regard to financial assistance to athletes, unethical recruiting, and increased violence in football. It is also interesting to note that in 1889, "William Lewis, of Amherst, became the first African-American to compete in big-time intercollegiate football" (Levinson & Christensen, 1996, p. 509).

Until the late 1800's, the growth of intercollegiate athletics for women was impeded. The culture at the time held that women were "too physically and emotionally delicate to tolerate the stress of competitive sports" (Levinson & Christensen, 1996, p. 508-509). Despite this view, women did begin to play intramural sports such as baseball, croquet, and tennis in the 1870's and 1880's. Soon after the emergence of basketball in 1891, it became the most popular women's sport, despite the changes in the rules that

female educators made to reduce the physical exertion and competitiveness for women. Women's intercollegiate athletics peaked around the turn of the century and did not resume its expansion until after WWII. "In 1923, the Women's Division of the National Amateur Athletic Federation formalized the opposition to competitive athletics that had hardened over the previous two decades by adopting a resolution opposing intercollegiate athletic competition for women" (Levinson & Christensen, p. 508-509). This further hampered opportunities for women to participate in intercollegiate athletics.

As higher education and intercollegiate athletics moved into the twentieth century, universities began to hire coaches, and athletics were added as extracurricular activities to attract students. During this time, the complexity of intercollegiate athletics grew, and the need arose for ancillary support services for intercollegiate athletics.

The Evolution of the Athletic Training Profession

The late nineteenth century brought team sports to the American scene. As mentioned earlier, Rutgers and Princeton played the first intercollegiate football game in 1869. Football was a very dangerous sport during this era. By 1905, there were 18 deaths and 159 serious injuries that resulted from participation in football. "During this period, the treatment of athletic injuries was handled by the coach or team physician, and the presence of an athletic trainer was a rarity" (Ebel, 1999, p.1). Harvard, which, in 1881, hired James Robinson as an athletic trainer, was an exception. Michael C. Murphy was another athletic trainer in the profession's early days. He coached and trained track teams at Yale and the University of Pennsylvania until he died in 1913. In the earliest days of athletic training, people saw the athletic trainer as one who would prepare an athlete for competition, much like a boxing trainer. This view would hold until 1914

when Samuel E. Bilik began to share the knowledge of the newly evolving profession. Bilik was a pre-medical student at the University of Illinois, who also worked as an athletic trainer. In 1916, Bilik published *Athletic Training*. He later published, *The Trainer's Bible*, which would come to be a key resource for the profession. For his role in the profession, Bilik became known as the "father of athletic training".

Two brothers, Charles "Chuck" Cramer and Frank Cramer, were also leaders of the profession. Chuck Cramer was a pharmacist and had been selling a liniment to area athletic teams. "In 1920, he founded Cramer Chemical Co. (later Cramer Products Co.), which would furnish supplies to training rooms throughout the country" (Ebel, 1999, p. 3). The Cramer brothers had the opportunity to travel with the U.S. Olympic team in 1932, during which time they learned numerous athletic training techniques. Using the information they had learned, the brothers took the knowledge and techniques and taught novices in a series of traveling workshops.

"With the dissemination of information and education, large numbers of men were drawn to the profession" (Ebel, 1999, p. 3). Furthermore, sports injuries were capturing the attention of doctors. In 1938, Dr. Augustus Thorndike published a book entitled *Athletic Injuries*. Years later, Brian J. McCue would observe, "For the first time, a long experience with athletes and their medical problems was presented by a member of a major university's medical school" (Ebel, p.3). As Newell (1984) describes in his keynote address, *Reflections on Athletic Training*:

> Many years ago, it was apparent that a large number of athletic trainers were in fact practicing medicine. This was undesirable, of course, and caused the medical profession to start taking a closer look at the activities of athletic trainers. It was

not until after World War II that the American Medical Association took recognition of athletics and established a section on Sports Medicine. (p. 256)

The original, but brief, National Athletic Trainer's Association was founded in 1938. This Association is not to be confused with the NATA today. The original association, with little time to develop because of World War II, was short-lived. The war took many athletic trainers away from their profession and utilized their skills to prepare the soldiers for service. This was a step back for the profession, in that it began to utilize athletic trainers as they had been used in the earliest days. The military gave them back one of their old responsibilities of physical conditioning. The new pressures that were placed upon athletic trainers by the war would greatly affect the profession in the years that followed.

The first attempt at creating a national association clearly failed as a direct result of World War II. After the war, athletic trainers began to see the need to organize themselves again. In 1947, athletic trainers began to organize themselves in conjunction with their athletic conferences (Ebel, 1999, p.3). "However, if athletic training was to ultimately develop into a full-fledged profession, this would require widely recognized and respected standards. Who-or-what-but a national association of practitioners could establish and enforce such standards" (Ebel, 1999, p.7)? With the help of the Cramer brothers, a small group of men met in Kansas City, Missouri. "The purpose of that first meeting was to form an association and to unite under one leadership all of the area associations that had formed the year before" (Newell, 1984, p. 256). It was the result of

this meeting that the new National Athletic Trainer's Association was founded. The NATA would, hence, meet on a yearly basis for a formal meeting.

From the formation of the NATA in 1950, the association began its tremendous growth. In 1956, the NATA established a journal of scholarly research and discourse, and, by 1957, the NATA adopted a code of ethics. Also in 1957, the association aligned itself with a number of organizations including the National Collegiate Athletic Association (NCAA), which was intended to help bring athletic training into the mainstream of sports medicine (Ebel, 1999, p.11).

With all of the developments of the NATA thus far, there was still one aspect of the profession that was not defined. Just what was the definition of an athletic trainer? The meeting in 1974 clearly defined once and for all just exactly what athletic training was. Athletic training was defined as "the art and science of prevention and management at all levels of athletic activity", and the athletic trainer was defined as "one who is a practitioner of athletic training" (Ebel, 1999, p.14). Still there was some controversy over the name of the profession. Many members would become tired of being confused and categorized as a boxer's trainer or a personal trainer. For this reason the NATA, in 1997, "proclaimed the name of the profession *athletic training* and it practitioners as *certified athletic trainers*" (Ebel, p. 15). Controversy regarding this issue still continues today.

In his 1984 address, Newell offered in his concluding statements, his view of the profession and its history. He remarked, "Those visionary people who started and nourished the Association, almost thirty-five years ago, aspired to placing athletic training on firm scientific footing, along with service and education. The aspiration has

continued and still stands as one of the functions of the Association" (Newell, 1984, p. 311). He went on to state further:

> On a day-to-day basis, the changes in our Association in the future will be neither dramatic or sudden. Their impact will be historical, not contemporary. They will come if we exercise the kind of wisdom, prolonged effort, and patience that go along with looking ahead to what the profession and the Association will be ten years or even another thirty-five years from now. (Newell, 1984, p.311)

Preparing Professionals for Athletic Training

"Many of the early athletic trainers had trouble with the notion that a career in the field needed to be accessed through a course of study" (Ebel, 1999, p.29). After all, the apprenticeship worked. The apprenticeship was the way to enter the professions centuries ago and was still found in some form today. The early athletic trainers had no formal education; they learned by doing. As the profession evolved, it became evident that formally educated athletic trainers were essential to the professions' survival. Ebel (1999) speaks for the need of formal education by saying, "If athletic training was to win recognition in the healthcare community, if it was to create opportunities for employment, then there was a need to determine what skills were required to practice and to develop appropriate courses of study" (p.29).

The main purpose of the NATA when it was founded in 1950, was "to build and strengthen the profession of training by the exchange of ideas, knowledge and methods of the art" (Ebel, 1999, p.29). Education would be the way that these basic building blocks would be bonded together. Many of the NATA's members would help to formulate and develop athletic training education.

William Newell played a significant role in athletic training education. In 1956, the NATA began to plant the seeds for the growth of athletic training education. The board of directors initiated a committee to "study avenues through which the professionalization of athletic training could be enhanced" (Delforge & Behnke, 1999, p.54). Newell would be the chair of this committee. This committee, which would later become known as the Professional Education Committee, centered its work on athletic trainer education and certification. Three years after the committee began its work (1959), the board of directors adopted and approved a comprehensive program of education. (See Table 1, below)

Table 1. **1959 Athletic Training Model Curriculum***

Physical therapy school prerequisites
(minimum 24 semester hours)
- Biology/zoology (8 semester hours)
- Physics and/or chemistry (6 semester hours)
- Social sciences (10 semester hours)
- Electives (e.g., hygiene, speech)

Specific course requirements
(if not included above)
- Anatomy
- Physiology
- Physiology of exercise
- Applied anatomy and kinesiology
- Laboratory physical science
  (6 semester hours, chemistry and physics)
- Psychology (6 semester hours)
- Coaching techniques (9 semester hours)
- First aid and safety
- Nutrition and foods
- Remedial exercise
- Organization and administration of health and physical education
- Personal and community hygiene
- Techniques of athletic training
- Advanced techniques of athletic training
- Laboratory practices
  (6 semester hours or equivalent)

Recommended courses

General physics
Pharmacology
Histology
Pathology

*cited in Ebel (1999), p.30.

The proposed 1959 curriculum had two important features to it. First, it had an emphasis on secondary school employment. The curriculum prepared students to get their teaching credential for high school physical and health education, as well as for employment as an athletic trainer. Students were prepared as both educators and athletic trainers. Secondly, the curriculum placed emphasis on courses that would lead to admittance into physical therapy schools. This emphasis on physical therapy could be the result of Newell's role on the committee, as he was also a physical therapist. It was thought that with additional education in physical therapy, an athletic trainer would be better able to serve both student athletes and the rest of the student body.

> With the exception of an advanced athletic training course and laboratory practice in athletic training, the proposed curriculum contained few courses that distinguished it from a typical major in physical education. Essentially, the curriculum represented a 'packaging' of the most relevant courses available in related academic areas, rather than an attempt to add new education experiences based on identification of learning outcomes to athletic training. (Delforge and Behnke, 1999, as cited in Ebel, 1999, p.31)

The 1959 curriculum ended up to be a stepping-stone for athletic training education. However, it would not be until ten years later that a college would offer an undergraduate athletic training education program.

There was a substantial void in athletic training education in the 10-year period after the approval of the original 1959 curriculum. The problem was that nobody wanted to undertake the arduous task of developing athletic training education programs. During the 1960's, only a handful of colleges and universities had developed curriculums. In 1969, the first undergraduate athletic training education programs were founded at Mankato State University, Indiana State University, Lamar University, and the University of New Mexico. "In 1968, a survey of physical education department administrators in colleges and universities throughout the United States revealed that less than one half were aware of the proposed curriculum" (Ebel, 1999, p.56). The results of this study showed the NATA that there was a need to place greater emphasis on athletic training education programs. Subsequently, the NATA formed the Professional Education Committee. This committee would be responsible for evaluating athletic training education curriculums and giving the programs NATA approval.

> Since 1969, the National Athletic Trainer's Association, primarily through the efforts of the Professional Education Committee, has provided guidance and assistance in curriculum development and has approved athletic training education programs in colleges and universities throughout the United States. (Delforge, 1982, p.288)

The first four undergraduate programs were given NATA approval later in 1969. It is also noteworthy that graduate level athletic training programs were also beginning to be developed in the late 1960's; for example, at Indiana State University and the

University of Arizona. However, NATA approval of the first graduate athletic training program would not occur until 1972.

Paralleling the founding of the first athletic training education program in 1969, the NATA formed the NATA Certification Committee, which began the process of developing a national certification exam. "In August of that year, an agreement was signed between the National Athletic Trainers Association and the Professional Examination Services (PES), a testing agency in New York City with long-term experience in health and related fields" (Westphalen & McLean, 1978, p.86). The standardized certification exam would ensure that all certified athletic trainers had met minimal competencies for practice in the profession. The first national certification exam was finally administered in 1970.

The founding of the first undergraduate athletic training education programs and the establishment of a national certification exam gave much needed recognition to the NATA. In 1968, the American Medical Association formally recognized The Standards of The National Athletic Trainers Association for Professional Competence and Certification, and encouraged its members to support the NATA in its efforts to implement these standards (Newell, 1984, p.257). The AMA now fully recognized the importance of the athletic trainer. Continued support for the NATA's certification process came in the years to follow from various state medical associations, the Joint Commission on Competitive Safeguards and Medical Aspects of Sports, and the American Association for Health, Physical Education and Recreation (Delforge & Behnke, 1999, p.56).

The 1970's were a decade of tremendous growth and action for athletic training education programs. "By 1973, there were 14 schools with NATA approved undergraduate athletic training programs, and only one of them, Indiana State, offered a program for women. Indiana State and the University of Arizona were also offering NATA-approved graduate programs"(Ebel, 1999, p.32). During the mid-70's, after continuous program and curricular review by the NATA Professional Education Committee, the 1959 curriculum was revised. This new, revised curriculum (see Table 2) took the focus away from course work with relevance to schools of physical therapy and focused coursework on that which is most specific to athletic training. The curriculum revisions were incorporated into the Guidelines for Development and Implementation of NATA Approved Undergraduate Athletic Training Programs (unreferenced, no longer available).

Table 2. **Mid 1970's Athletic Training Curriculum Course Requirements***

Anatomy (1 course)
Physiology (1 course)
Physiology of exercise (1 course)
Applied anatomy and kinesiology (1 course)
Psychology (2 courses)
First aid and safety (1 course)
Nutrition (1 course)
Remedial exercise (1 course)
Personal, community, and school health (1 course)
Basic athletic training (1 course)
Advanced athletic training (1 course)
Laboratory or practical experience in athletic training to include a minimum of 600 total clock hours under the direct supervision of an NATA-certified athletic trainer.

* cited in Delforge & Behnke, 1999, p.56.

The original 1959 curriculum model required students to take courses that would provide them with a credential allowing them to teach health or physical education in secondary schools, as well as work as an athletic trainer. This requirement was dropped from the 1970's curriculum due to the fact that teaching opportunities in physical education and health were limited. The 1970's curriculum entitled students to choose a major they desired, but the NATA required that schools with formal athletic training programs also have a program leading to a teaching credential. This requirement remained effective until 1980.

Delforge and Behnke (1999) see the 1970's curriculum as "limited but discernable progress toward identification of a specialized, common body of knowledge for certified athletic trainers" (p. 56). They also stated, "revisions of the 1959 curriculum model that emerged during the 1970's represented an effort to eliminate irrelevant, or minimally relevant, content rather than an attempt to add new, innovative learning experiences" (p. 57).

In a related project in the 1970's, the NATA Professional Education Committee identified behavioral objectives for each course. Skill competencies and learning objectives were also established to begin to identify a unique body of knowledge for the certified athletic trainer. "The behavioral objectives developed during the 1970's provided a conceptual stimulus to formulation of the Competencies in Athletic Training, subsequently developed by the Professional Education Committee in 1983" (Delforge & Behnke, 1999, p. 57).

The Athletic Training Major Is Established

During the mid-to-late 1970's, "As the number of NATA approved programs proliferated and as these schools expanded their course offerings, the concept of the athletic training major became increasingly viewed as a reasonable and practical educational goal"(Delforge, 1982, p.288). "At the same time, the demands of the job seemed to be calling for a broader scope of education than what schools could teach as an academic specialization or concentration" (Ebel, 1999, p. 33). The level of expertise of the certified athletic trainer as a health care provider carried with it the need to provide a more relevant educational base. It was time for the establishment of an academic major in athletic training. Sayers "Bud" Miller, Jr., was chair of the Professional Education Committee in the late 60's and was an advocate of an athletic training major. "Before his death in 1980, he proposed the major as a NATA education goal" (Ebel, p. 33).

> At it June 1980 meeting, the Board said yes to Miller's request. The resolution called for all approved undergraduate programs to offer a major field of study in athletic training by July 1, 1986. This deadline was later extended to July 1, 1990. (Ebel, 1999, p. 33)

The extension required that schools be in the process of program development by 1986. If a university did not meet the 1986 deadline for compliance, the NATA would remove the approved status of that program. "In addition, the Board of Directors adopted the policy that, after July 1, 1986, initial NATA approval would be given only to programs that met the standards for an academic major" (Delforge & Behnke, 1999, p.57).

Although Miller had passed, the concept of the athletic training major was kept alive by John Schrader of Indiana University, who succeeded Miller as interim chair of the

Professional Education Committee. In 1982-83, the Professional Education Committee surveyed 62 deans and department heads regarding athletic training majors in their respective institutions (Ebel, 1999, p.33). "Support from the 62 administrators surveyed was nearly unanimous. Only a handful indicated foreseeable barriers to implementation of an athletic training major in their respective schools" (Delforge & Behnke, 1999, p.57). This overwhelming response was just what the NATA needed.

Gary Delforge of the University of Arizona took over as the chair of the Professional Education Committee in 1982. With help from the NATA Board of Directors, a realistic timetable was put into place for instituting a NATA- approved athletic training major. Now, the Professional Education Committee had the arduous task of developing the components of an athletic training major. In June 1983, the Committee published *The Guidelines for Development and Implementation of NATA Approved Undergraduate Athletic Training Programs,* which contained the standards for the development of undergraduate programs as academic majors (Delforge & Behnke, 1999, p. 57). This publication initiated the conversion of pre-existing NATA approved specializations into NATA approved undergraduate academic majors. To ease the possibility of problems in the administrative approval process for some institutions, a new definition of an equivalent athletic training major was developed. The definition of the Professional Education Committee and the NATA Board of Directors read:

> A course of study in athletic training which is at least equivalent to the minimum number of semester/quarter hours which constitutes a major in the educational unit in which the athletic training education program is housed. The athletic training education program must also be designed so that students are provided

with adequate opportunity to meet NATA specified behavioral objectives. (Delforge & Behnke, 1999, p. 58)

For example, if a program of study in athletic training existed in a physical education department that required a minimum of 45 credits for completion, the athletic training program must include a minimum of 45 credits for completion. Furthermore, if the NATA specified behavioral objectives were not met in the 45 credits, the provision was made for the addition of as many credits necessary for students to attain the objectives. The allowance was also made for the addition of courses that were in similar scope and relevance in the department or allied departments.

The 1983 Guidelines also incorporated two changes in the curriculum design. The first feature was inclusion of specific areas of subject matter, removing specific course requirements (See Table 3). The move to the subject matter approach provided more flexibility in the development of educational experiences, yielding varying degrees of emphasis on specific learning outcomes. These subject matter areas could be separate courses or instructional units within existing courses (Delforge & Behnke, 1999, p. 58).

Table 3. **1983 Athletic Training Curriculum Subject Matter Requirements***

Prevention of athletic injuries/illnesses
Evaluation of Athletic injuries/illnesses
First aid and emergency care
Therapeutic Modalities
Therapeutic exercise
Administration of athletic training programs
Human anatomy
Human physiology
Exercise physiology
Kinesiology/Biomechanics
Nutrition
Psychology

Personal/community health
Instructional methods

*cited in Delforge & Behnke (1999), p.58.

The second major component of the 1983 Guidelines was the Competencies in Athletic Training. In 1982, the NATA retained Professional Examination Service of New York to conduct a nationwide role delineation study. This was intended to identify an athletic trainer's responsibility and the knowledge and skill requirements needed to fulfill it. Everything that an entry-level certified athletic trainer would need to know and expect to do would be spelled out – in black and white – in the "performance domain" (Ebel, 1999, p. 33-34). The two changes found in the 1983 Guidelines promoted the development of competency-based athletic training programs.

Following the resignation of Gary Delforge as chair of the NATA Professional Education Committee, Robert S. Behnke was appointed as the new chair in 1987. Under Behnke's direction, the committee continued to oversee the conversion of NATA approved undergraduate education programs to academic majors or equivalent majors until the process was complete in 1990 (Delforge & Behnke, 1999). By the middle of 1990, the deadline for colleges to convert their approved bachelors degree programs to academic majors or the equivalent, all 73 schools had done so" (Ebel, 1999, p.34).

"During the late 1980's, preliminary work began that led to a milestone in the professional growth of athletic training and athletic training education" (Delforge & Behnke, 1999, p.57). The American Medical Association (AMA) formally recognized athletic training as an allied health profession in June of 1990. AMA recognition as an allied health profession was crucial for athletic training education. The NATA Board of Directors decided to seek accreditation of entry-level athletic training education programs

by the AMA Committee on Allied Health Education and Accreditation (CAHEA). In order for program accreditation to occur, the profession must be formally recognized by the AMA, which now occurred. Commenting on this historic event, Robert Behnke stated:

> It is extremely gratifying that the nation's largest medical organization has recognized athletic trainers. We really haven't had anyone formally acknowledge us as an allied health profession before. Athletic trainers now have a professional status in the health care field. (Delforge & Behnke, 1999, p.58)

The accomplishment of AMA recognition and accreditation by CAHEA was followed by the establishment of the Joint Review Committee for Educational Programs in Athletic Training (JRC-AT) by co-sponsors NATA, AMA, and three professional societies representing family physicians, pediatricians, and orthopedic surgeons in sports medicine (Ebel, 1999). The JRC-AT was independent of the NATA. Behnke served in a dual capacity as the first chair of the JRC-AT and as the chair of the Professional Education Committee until 1998. In 1998, Peter Koehneke was elected chair of the JRC-AT. The Professional Education Committee was disbanded later in June of 1998.

The first task of the JRC-AT was to develop standards and guidelines governing JRC-AT review and CAHEA accreditation of entry-level education programs. The JRC-AT utilized the existing Guidelines for Development and Implementation of NATA Approved Undergraduate Athletic Training Education Programs as well as the 1983 Competencies in Athletic Training developed by the NATA Professional Education Committee as a basis for the new guidelines. "Subsequently, Essentials and Guidelines

for an Accredited Education Program for the Athletic Trainer was approved by the cooperating organizations and the AMA CME (American Medical Association Council on Medical Education) on December 6, 1991" (Delforge & Behnke, 1999, p.58).

CAHEA was disbanded in 1994 by the AMA. The new independent agency taking the place of CAHEA was the Commission on Accreditation of Allied Health Education Programs (CAAHEP). CAAHEP was a well-supported accreditation agency for education programs in the allied health professions. CAAHEP used essentially the same system as CAHEA used for accrediting education programs. "As of June 1998, 82 entry-level programs had been accredited by CAAHEP, including 68 previously NATA-approved undergraduate programs" (Delforge & Behnke, 1999, p.59).

"During the mid-1990's, two related policy changes by the NATA Board of Directors and the NATA Board of Certification (NATABOC) affected entry-level and graduate athletic training education programs" (Delforge & Behnke, 1999, p.59). The first change was that the NATA Professional Education Committee implemented a policy that, as of August 1996, NATA approval of graduate athletic training education programs would only be granted to those institutions that provided advanced learning experiences beyond those required by CAAHEP. In June 1998, the NATABOC eliminated the graduate education program as a route to certification. As a result, in order to be admitted into a graduate level athletic training education program, a student must have passed the NATABOC certification exam or must have completed all requirements in order to sit for the certification exam.

"The delineation between entry-level and post-certification athletic training education in 1996 established new parameters for advanced learning and scholarship"

(Delforge & Behnke, 1999, p.59). Research and scientific inquiry have always been a part of graduate education. Unfortunately, this was lacking in athletic training. "Osternig in 1988(as cited in Delforge & Behnke, p.50) referred to research as the 'missing ingredient' in the pursuit of professionalism." In 1991, with the founding of the NATA Research and Education Foundation, a new dimension was added to athletic training education and the delineation of education programs played an important role in research and scholarship.

"In December 1996, the NATA Board of Directors adopted several recommendations submitted by the NATA Education Task Force, an ad hoc task force appointed in June 1994 to address the education and professional preparation of certified athletic trainers" (Delforge & Behnke, 1999,p.60). In 1997, the second major policy change by the NATABOC made a significant step toward standardization of education requirements for certified athletic trainers. Prior to this policy change there were two routes to certification. There was an internship route and a curriculum route. The internship route was essentially an apprenticeship program that required a bachelor's degree and on-the-job training of at least 1800 hours supervised by a certified athletic trainer (Ebel, 1999, p.37). The curriculum route entailed graduation from an NATA approved undergraduate athletic training education program that included two years of supervised clinical education (Ebel, p. 37). Records of certification exams showed that curriculum students consistently outperformed internship students. "Consequently, beginning in 2004, candidates would need a bachelors degree and completion of a CAAHEP accredited entry-level athletic training program to sit for the exam" (Ebel, p.42).

> With elimination in the early 1980's of physical therapy programs and the special consideration route to certification, with discontinuation in 1998 of advanced graduate athletic training education programs, and with the impending elimination of the internship route, CAAHEP accredited entry-level programs will become the only avenue to NATABOC certification. (Delforge & Behnke, 1999, p.60)

This was done to standardize athletic training education and enhance consistency with professional preparation in other allied health disciplines (Delforge & Behnke, 1999, p. 60).

The Education Task Force that was established by the NATA in 1994 provided the means for continued growth of athletic training education. The task force was responsible for reviewing all aspects of athletic training education. "The NATA Board of Directors challenged the task force to present recommendations that would 'influence the decisions the NATA Board of Directors must make concerning future direction of athletic trainer education and professional preparation'"(Delforge & Behnke, 1999, p.60).

The Education Task Force made a recommendation based on the need to streamline the educational functions of the NATA (Delforge & Behnke, 1999). Fearing the duplication of educational activities, the NATA created the Education Council in February 1996, appointing Chad Starkey, Northeastern University, chair. The Education Council served as the "clearinghouse for educational policy, development, and delivery" (Delforge & Behnke, 1999, p.60). The Education Council further formed three standing committees to address athletic training education at the entry-level, graduate-level, and continuing education. The Education Council went on to revise the Standards and Guidelines for the Development and Implementation of NATA Accredited Graduate

Athletic Training Education Programs in 1997 and implemented NATA accreditation of graduate programs. The Education Council quickly began to perform the responsibilities that it was created for. With the newly created Education Council, the NATA Professional Education Committee was dissolved after 28 years of overseeing athletic training education (Ebel, 1999, p.42). The work of the Education Council still goes on to this day, providing the continued leadership in the professional preparation of certified athletic trainers.

> Obviously, education is an endless activity, subject to periodical re-evaluation and revision. Education Reform is the instrument adopted by NATA to meet whatever the 21st century requires for practicing in diverse settings. At the end of NATA's 'first fifty,' Education Reform had amassed widespread support, at least conceptually. On many of the specifics, there were some athletic trainers who had reservations. (Ebel, 1999, p.81)

Athletic Training Education Demographics

Currently athletic training education is growing at a rapid pace. There are presently 160 CAAHEP accredited undergraduate athletic training education programs. There are also 16 NATA approved graduate athletic training education programs.

As of March 13, 2002, there are 187 institutions with athletic training education programs that are in candidacy status. There are also nine institutions that have entry-level master's athletic training education programs in the candidacy status. Candidacy status does not mean that accreditation will be granted in the future. These schools are currently under review or will be reviewed by the JRC-AT for accreditation.

Approximately 80% of the programs are located in the eastern portion of the United States, and 40% of the programs can be found in a band of contiguous states starting from Illinois and extending to Massachusetts.

Chapter 3

ANALYSIS AND DISCUSSION

I will begin this chapter with a roadmap, if you will, in order for the discussion to take on a purposeful meaning. This chapter begins with an introduction to contemporary change theory and provides a number of different examples. Although there are numerous change theories in the literature (e.g., Fullan, 2001; Guskin, 1996; Heifetz, 1993; Kotter, 1995; Beer, Eisenstat, & Spector, 1990), each change theory has its own unique characteristics. Notwithstanding this fact, there are various themes that are common to many of them. As the discussion continues, these similarities will become more evident. For the purpose of this discussion, I have chosen a few examples of contemporary change theories and presented them in a series of tables so the reader can conceptualize the common themes and differences among change theories.

John Kotter, a professor of leadership at the Harvard Business School has written many articles on change. "Change, by definition, requires creating a new system, which in turn always demands leadership" (Kotter, 1995, p.60). Although much of his experience in change has focused on the corporate and business world, his change theory most certainly can be applied to higher education. Generically referring to change, Kotter states, "The basic goal has been the same: to make fundamental changes in how business is conducted in order to cope with a new, more challenging market environment" (p.59). Kotter 's framework for change is described below in Table 4.

Alan Guskin has been the chancellor of Antioch University since 1994. He has taught and written a number of articles about the change process in universities. Guskin (1993) cites a quote from Marjorie Kelly in her article, "Taming the Demons of Change", in the July/August 1993 issue of *Business Ethics*, "It comes down simply to this: that we can't advance as long as we're holding tight to what no longer works. And we have to break the mold before a new form can emerge"(p.28). His ideas for the change process are found in Table 5.

In Table 6, I present Michael Heifetz's framework for change. His seven-stage framework can be generalized to almost any organization. In this context, it is applied to higher education. In deciding to take charge of change, Heifetz (1993) states:

> We have a simple choice regarding change. Either we can let it operate on its own, affecting our lives at will, or we can choose to manage change as best we can. By accepting change as a natural process and choosing to manage it, we're really choosing life over entropy. By exercising our will, we become a creative force in the change process instead of letting it run its own course. By choosing to manage change, we're choosing to use our will and capability to create the kind of life we desire. We're selecting health and vitality over chaos and entropy. (p.3)

Table 7 describes the five components that Michael Fullan believes are critical to the leadership of change. "Each and every leader, whether the CEO of a multinational corporation or a school principal, can become more effective-much more effective-by focusing on a small number of core aspects of leadership" (Fullan, 2001, p.2).

Leadership is an important facet in the change process. Fullan's ideas are just one of the many keys to successful change in an organization.

The last table I present is Table 8. This table is another of the many examples of the frameworks for the change process. In this framework, Beer, Eisenstat, and Spector focus on starting the change process by drawing ideas and energy from the bottom-up.

All of these frameworks are unique and provide interesting insights on what steps are needed to successfully achieve change.

Table 4. **Eight Steps to Transforming Your Organization***

1. Establishing a Sense of Urgency
   - Examining market and competitive realities
   - Identifying and discussing crises, potential crises, or major opportunities
2. Forming a Powerful Guiding Coalition
   - Assembling a group with enough power to lead the change effort
   - Encouraging the group to work together as a team
3. Creating a Vision
   - Creating a vision to help direct the change effort
   - Developing strategies for achieving that vision
4. Communicating the Vision
   - Using every vehicle possible to communicate the new vision and strategies
   - Teaching new behaviors by the example of the guiding coalition
5. Empowering Others to Act on the Vision
   - Getting rid of obstacles to change
   - Changing systems or structures that seriously undermine the vision
   - Encouraging risk taking and nontraditional ideas, activities, and actions
6. Planning for and Creating Short-Term Wins
   - Planning for visible performance improvements
   - Creating those improvements
   - Recognizing and Rewarding employees involved in the improvements
7. Consolidating Improvements and Producing Still More Changes
   - Using increased credibility to change systems, structures, and policies that don't fit the vision

- Hiring, promoting, and developing employees who can implement the vision
- Reinvigorating the process with new projects, themes, and change agents

8. Institutionalizing New Approaches
   - Articulating the connections between the new behaviors and corporate success
   - Developing the means to ensure leadership development and succession

* cited in "Leading Change: Why Transformation Efforts Fail" by John P. Kotter, Harvard Business Review, March-April, 1995, p. 61.

Table 5. **The Change Process in Restructuring Universities***

Step 1. Building a working consensus
- Create a powerful initiating/coordinating group that develops the strategy to begin the change process
- Identify key stakeholders and leaders and encourage them to join the effort
- Establish a sense of urgency by present, valid data that points to the need for change
- Communicate the urgency of the need widely and often

Step 2. Building a working consensus around a vision of the institution's future
- Create a broad vision around where the institution wants to be?
- Seek out others throughout the institution to join the effort
- Maintain a clear focus on the vision
- Communicate the vision widely and often

Step 3. Working with those committees to change
- Move forward with the implementation of the vision with those who are committed to the change. As progress is achieved, solicit and encourage others to join. Deal with the resistors last.

Step 4. Phased Implementation Process
- Create smaller implementation teams that work under the direction of a powerful central coordinating group responsible for implementing the vision
- Create and communicate early victories
- Create demonstration projects to test out new ideas, thus creating models of success
- Establish a schedule for planned implementation of the changes and communicate them widely.

*cited in "Facing the Future" by Alan E. Guskin, Change (July/August 1996)

Table 6. **Seven Steps in the Change Cycle ***

Stage 1 – Choosing the Target

- Understand why the change is needed and why the change is important
- Identify the direction the change effort will take
- Identify a core group of organizational leaders to guide and facilitate the change
- Articulate and share the vision of the future throughout the organization based on the desired effects of the change

Stage 2 – Setting Goals

- Expand and more clearly define the purpose, scope and plans for change
- Organize a design, planning, or implementation cross-functional team
- Identify potential sources for resistance and potential obstacles to change
- Identify and secure the resources necessary to implement the change
- Articulate clear and measurable goals and objectives and communicate them widely and often throughout the organization

Stage 3 – Initiating Action

- Reinforce the importance of the change throughout the organization as initiating action begins
- Provide frequent tangible signs of progress, especially to skeptics
- Conduct in-progress audits to ensure that the project remains on track

Stage 4 – Making Connections

- Review the changes that are taking place to mitigate feelings of loss, confusion, and conflict
- Begin to establish connections among the various facets of the organization in which changes are occurring
- Continue to trumpet the positive accomplishments and effects of the change, especially with skeptics, throughout the organization
- Reinforce that change is a process, not an event

Stage 5 – Rebalancing to Accommodate the Change

- Make adjustments or rebalance areas of the organization not directly involved but affected by the change, including those in systems, procedures, and personal relationships; bring the new system into a new state of internal balance

Stage 6 – Consolidating the Learning

- Evaluate the change effort: Were the goals and objectives achieved? What was learned from the change effort? What new objectives have surfaced?

Stage 7 – Move to the Next Change Cycle

- Begin planning for the next change effort

*cited in "Leading Change: Overcoming Chaos" by Michael Heifetz, 1993.

Table 7. **Five Components of the Leadership of Change***

1. Sense of Moral Purpose
   - Leaders act with the intention of making a positive difference in the organization and the lives of its members.

2. Understanding the Change Process
   - The goal is not to innovate the most
   - It is not enough to have the best ideas
   - Redefine resistance as a positive force
   - Transforming the culture
   - Never a checklist; always complexity

3. Establishing Relationships
   - Leaders constantly foster purposeful interaction and problem solving and are wary of early consensus.

4. Knowledge Creation and Sharing
   - The continual sharing of information, both inside and outside the organization, to create new knowledge.

5. Coherence Making
   - Leaders constantly strive to clarify the ambiguity that usually accompanies change, especially in the early stages and provides coherence in the process.

*cited in "Leading in a Culture of Change" by Michael Fullan, 2001.

Table 8. **Six Change Strategies***

1. Mobilize commitment to change through joint diagnosis (among members of the organization).

2. Develop a shared vision about how to organize and manage the organization.

3. Foster concerns for the new vision, competence to enact it, and cohesion to move it along.

4. Spread revitalization throughout the organization without pushing it from the top.

5. Institutionalize revitalization through formal policies, systems, and structure.

6. Monitor and adjust strategies in response to problems in the revitalization process.

*cited in "The Critical Path to Corporate Renewal" in the Harvard Business Review by Beer, M., Eisenstat, R., & Spector, B. (1990).

The change theories presented by Kotter, Guskin, Heifetz, Fullan, and Beer, Eisenstat, & Spector have definite similarities among them. After reviewing the examples above, the reader may have already began to notice the common themes that are evident among the examples. The themes that are similar in the respective change theories that I have selected for this discussion are: the emergence of leadership, a shared vision for the future, establishing a sense of urgency, initiating action of the vision, and making the successful outcomes of the change known for others to see. These common themes will be elaborated upon later in this chapter.

The changes that occurred throughout the transformation of American higher education and how, as emerging needs dictated, athletic training was (changed) transformed from a vocational skill to an academic discipline, both reflect elements of some of the contemporary change theories. Many of the leaders in American higher education, beginning with the founders of Harvard and Yale, provide examples of how change theory can be applied to the history of American higher education. Furthermore, many of the early leaders in athletic training initiated changes in athletic training education. Adapting to change is always a necessity in order for a group or entity to move forward. As Peer and Rakich (2000) state,

> Change is a powerful force that is most often met with resistance. The strong legacy of higher education institutions further complicates the process. An institution's culture is its mainstay in a constantly changing environment. However, to improve the quality of American higher education, change is necessary. (p. 193)

To understand the basic change process, Michael Heifetz (1993) states:

> Each of the seven stages of change has its own purpose and characteristics. In each stage, some significant smaller change must take place to propel the cycle forward. These smaller changes build upon each other, until the cycle is complete. There needs to be sufficient motivation and sustained effort to push a change through all seven stages to completion. (p.5)

Here, Heifetz is referring to his own change theory, but this can be conceptualized to the general framework for contemporary change theory. Even though only common themes or steps in change theories will be discussed in this chapter, each theme or step is important and builds on the previous step.

One of the characteristics of most contemporary change theories is leadership. Without a true leader, change will never be successful. "The key to changing a university or college is to start the process" (Guskin, 1996, p.28). The leader is the person who starts the change process. The history of American higher education is replete with leaders such as John Eliot at Harvard, Thomas Hooker of Yale, Benjamin Franklin of the University of Pennsylvania, Thomas Jefferson of the University of Virginia, Justin Morrill, Ezra Cornell, Charles VanHise, and Robert LaFollette. These are the people who realized that American higher education could not advance as long as it held tight to what was no longer working. The mold would have to be broken before a new form could emerge. Leadership is necessary to develop and facilitate a vision, and the communication of that vision. Leaders also maintain the focus on the change over the lengthy period of the process. Guskin (1996) states,

> Strong leadership commitment will be needed to maintain the focus of key players over a lengthy period of time, and to convince those resisting that the change is highly likely, thereby encouraging some to make the leap earlier rather than later. This strong commitment is also important in protecting and encouraging those deeply involved in the risky business of experimenting with and making the change. (p.30)

"Understanding how issues at a particular institution are tied to those of higher education in general – regionally, nationally, and internationally – helps leaders overcome the insularity that impedes movement" (Eckel, Hill, Green, & Mallon, 1999, p.5).

When a person assumes a leadership role in an organization, that person no doubt has plans or views for the organization. Often times these views are developed during the course of the leadership position. The leader often sees the need for the organization to change in some way. These views or plans are often referred to as visions. "A vision says something that helps clarify the direction in which an organization needs to move" (Kotter, 1995, p.63). Visions usually come from one person and are developed by those who are in influential positions within the organization. Kotter goes on to say, " Without a sensible vision, a transformation effort can easily dissolve into a list of confusing and incompatible projects that can take the organization in the wrong direction or nowhere at all" (Kotter, p.63). A vision is one of the most critical aspects when it comes to the change process.

In the change process, not only is the vision itself important but, even more important, is the sharing of the vision. The shared vision is what is needed in order for

change to actually take place. A leader may develop a vision and even try to make a change but, unless the vision is shared by those in and around the organization, change will not occur. The development of a shared vision requires communication. People need to know and understand why the change is important and how the change will benefit them personally in the long run. Eckel et al. (1999) state, "Institutional leaders who succeed with change initiatives clearly articulate why it is necessary and why current approaches no longer work" (p.2). Once people see the benefit of change, they are more likely to get involved.

Another important common theme that is present in the change process that is seen in contemporary change theories is establishing a sense of urgency. This happens to be Kotter's first step in his change process (see Table 4). Kotter (1995) feels that, "this first step is essential because just getting a transformation program started requires the aggressive cooperation of many individuals. Without motivation, people won't help and the effort goes nowhere" (p. 60). Beer, Eisenstat, & Spector (1990) also establish a sense of urgency in their first change strategy by mobilizing commitment to change through joint diagnosis (see Table 8). The members of the organization are involved in the diagnosis and establish their own sense of urgency. Stage 1 of Heifetz's change theory focuses on choosing the target (see Table 6). His first stage requires the understanding of why the change is needed and why the change is important. The urgency is found in the understanding of why the change is important.

A shared vision can only go as far as the leader takes it. Change cannot take place without action. As risky as the change process can be, visions must be acted upon. Everyone within the organization may not be in total agreement with the vision and the

change but the leader must act anyway. Action is the only way a change can be made. It is critical for a leader to move forward and act with others who are committed to the change. Action is often combined with making successes known.

In most instances change is a lengthy process. In order for the change to become institutionalized and accepted by all, it is critical for those involved to see success. Success in the form of short-term wins helps those who may be uncertain to see the results of the change process. By waiting until the end to show success, those who are concerned about the change in the long term do not get a chance to sense accomplishment and, therefore, this may increase resistance to change. No matter how big or how small the success is, by presenting small successes over the duration of the process, people will see the benefits and will be more accepting to the change over the long term.

The founding of Harvard and Yale began the great tradition of higher education in America. It was the Puritans who provided the leadership of the early colonial colleges. John Eliot provided the leadership at Harvard and Thomas Hooker provided the leadership at Yale. The leaders of the 17th century developed a shared vision that focused on creating institutions of higher education in America that would serve to prepare and train men of the elite class to become ministers and civic leaders in the community. The Puritan religion, which was the dominant religion at the time, " insisted upon educating their children and they considered a learned ministry vital to the community" (Westmeyer, 1997, p.8). The intolerance of other religions by the Puritans and the need for a trained Puritan leadership to maintain the religious dominance provided the sense of urgency for the founding of the early colonial colleges. The curricula of the early colonial colleges were basic and fit the education needs of the time. Both Eliot and Hooker were

successful in accomplishing the goals that their respective institutions were founded to accomplish. As America slowly began to move westward, needs changed. The leaders that would follow Eliot and Hooker would share similar visions and provide the leadership to meet the various demands that were placed on American higher education.

The leaders of The College of New Jersey at Princeton (1746), later to be known as Princeton, recognized the need to admit students of any religious faith. The public was beginning to demand nondenominational education. The leaders at Princeton shared a vision that the institution would be for statesman, not one as a Presbyterian seminary. Secular education was not working and the leadership sensed the urgency to begin to move away from the secular tradition of education. Princeton was successful in making this change, which enabled higher education to evolve further.

Benjamin Franklin was another leader in the change of American higher education. Franklin founded the College of Philadelphia (1755), later to be known as the University of Pennsylvania. Franklin was a Quaker who developed a vision of a college that would serve the needs of American society, as opposed to the existing colleges which, for the most part, served the needs of the church. Franklin communicated his vision in *Proposals Relating to the Education of Youth in Pennsylvania.* William Smith, was empowered by Franklin's visions, expanded them, and communicated the vision further and published *A General Idea of the College of Mirania.* Both men understood that the "old ways" of education were not working anymore. There was a need to educate men to serve the needs of the growing nation. The need to educate men to serve the nation's needs equated to a sense of urgency to change the focus of the goals of higher education. Franklin later invited Smith to preside over the new college. In

inviting Smith to preside over the college, Franklin acted on his vision and put in place a leader who shared a similar vision and a person who would help to further change higher education.

Thomas Jefferson was an influential leader in American higher education. Jefferson's University of Virginia (1825) was the first university that was controlled by the state. Jefferson was such a powerful and influential leader that his ideas succeeded where others had failed (Westmeyer, 1997, p. 26). Jefferson developed and shared his vision for a university that would be controlled by the legislature and supported with state funds. Jefferson's Virginia was both practical and philosophical. His university was divided into eight schools. Students were free to choose what school they would attend. This was the formation of an elective system. Although several institutions that were founded were called universities prior to the inception of Jefferson's idea, the University of Virginia laid the foundation for the true university, which would include multiple "colleges" (Westmeyer, p.26-27).

America was continuing to move westward. The growing nation needed education in the mechanics profession, surveying, science, and agriculture. Just as higher education had leaders in the period of the early colonial colleges, Justin Morrill was a leader in American higher education in the 1860's. Morrill was empowered by the vision Franklin had years earlier, seeing the need for new training and preparation in agriculture and the mechanical arts in the face of the ever-changing nation. Morrill provided the leadership in his proposition of land-grant colleges. Morrill's vision was to promote liberal and practical education for the professions of life. Justin Morrill's idea created a sense of urgency. In order for America to grow, more colleges and universities were

needed. The agricultural industry was suffering. The citizens of the states desired education in practical fields such as education, agriculture, medicine, and mechanics. Morrill's idea offered endless possibilities for growth. Although Morrill's bill was vetoed the first time, he further communicated his sense of urgency by utilizing Darwin's *The Origin of Species.* Morrill used the emphasis on the influence of science in human affairs that Darwin wrote of in his book to convey the need for the passage of his proposed bill. Research was needed to improve the quality of life and to improve the effectiveness of industry. Essentially, without more colleges and universities, and the services they have to offer, America might stagnate. The ideas that Morrill had provided the much needed financial impetus to allow higher education to develop into a liberal, practical form.

Similarly, evidence of change theory can be seen with the inception of the Cornell Plan. Erza Cornell and Andrew White continued the great tradition of change in American higher education when they founded Cornell University. Cornell and White provided the leadership that would allow American higher education to continue to evolve from the classical curriculum and expand into practical, liberal education. Research and practical education was being demanded by all. Opportunities for women were being created. This created a sense of urgency for Cornell and White to merge science, practical education, elective possibilities, and access. Cornell and White manifested their leadership by founding a land-grant institution that offered practical education, which was open to all people, including women. By opening educational opportunities to all people in areas that were of interest, success and support were almost immediate. As discussed in the previous chapter, Cornell was even publicly criticized for

his handling of endowments, which resulted in even more gifts (Westmeyer, 1997, p 72). Cornell and White were very successful with the Cornell Plan. Having significant success and support with the Cornell Plan, both Cornell and White would become the leaders who would provide a stepping-stone and the empowerment for the continuing trend of change in higher education.

Robert LaFollette and Charles VanHise were the leaders of the Wisconsin Idea. These two men, empowered by the successes of the Morrill Act and the Cornell Plan, attempted to further develop and expand higher education. Many of the ideas that LaFollette and VanHise had for Wisconsin were shared by Henry Tappan at the University of Michigan and by Andrew White at Cornell. LaFollette and VanHise sensed the growing concerns of the people, regarding the practical aspect of the college curriculum. At the time the state of Wisconsin had some problems that needed to be solved. The people desired something that was responsive to their needs. They also needed to solve the problems the state was experiencing. The University of Wisconsin had the resources, when combined with the state, that could help the people of the state. LaFollette and VanHise created a sense of urgency for the university and state to work together. In order for the state of Wisconsin to be successful and improve, the state and the university needed to form an alliance. The leadership for the Wisconsin Idea would be manifested by placing the University of Wisconsin at the service of the people, which appealed to the people of the state of Wisconsin. LaFollette and VanHise had early successes at Wisconsin because they used the resources of the university to solve public problems, improve business management, and to provide increased technical knowledge for the state's industry. The people of the state saw early success of the Wisconsin Idea,

in that it helped the state's dairy industry save hundreds of millions of dollars. With evidence of successes that directly impacted the people of the state, LaFollette and VanHise were successful in empowering the people of Wisconsin and throughout American higher education to buy into the idea of university extension..

Concurrently, as one can see the evidence of change theory in the development of American higher education, one can also see the evidence of change theory in the evolution of athletic training as a discipline within American higher education. In the section that follows, I provide the reader with examples of how the elements of contemporary change theory can be found in the evolution of athletic training education.

Athletic training education has come a long way since its inception. "Starting from scratch, the profession came to have more quality educational programs than Woodstock had rock bands" (Ebel, 1999, p.81). There was also a means to test and certify athletic trainers' preparation. "These accomplishments far surpassed Lindsay McLean's initial goal of developing education to save the profession from individuals whose only qualification was being buddies with the coach" (Ebel, p.81). As Ebel further reported,

> Obviously, education is an endless activity, subject to periodical re-evaluation and revision. Education Reform is the instrument adopted by the NATA to meet whatever the 21st century requires for practicing in diverse settings. (p.81)

To say that athletic training underwent a dramatic shift is perhaps an understatement. "As Chad Starkey, chair of the Education Council observed, athletic training started out in one profession (athletics) and wound up in another (healthcare)" (Ebel, 1999, p.79).

In its earliest form, athletic training was never thought of as a profession. There was a limited knowledge base to the vocation. One of the earliest leaders in athletic training education was Samuel Bilik. Bilik, who came to be known as the "father of athletic training" sensed the urgency to share the knowledge of the newly evolving profession of athletic training. He saw that there was a need to get the word out. He convinced people that athletic trainers were not boxing trainers nor were they coaches. Athletic trainers were professionals. In 1914, Bilik took the leadership role of educating the public on the true role of the athletic trainer. His successful publications provided the stepping-stone for athletic training education to emerge.

The Cramer brothers, Chuck and Frank, also assumed leadership roles in the profession in the 1920's-1930's. Not only did the brothers open the first company to furnish supplies to training rooms, they also made use of their previous professional experiences to advance the knowledge base of the profession by educating novices in traveling workshops. Decades later, in 1950, the Cramer brothers continued their leadership roles in athletic training by helping to organize the NATA as it exists today.

William Newell emerged as a leader in athletic training education in the 1950's. "Newell became the executive secretary of NATA in 1955 and for the next 13 years he used that position to put the association on a rock-solid footing" (Ebel, 1999, p. 10). Newell's vision regarding change in athletic training education can be seen in a quote that was cited earlier:

> On a day-to-day basis, the changes in our Association in the future will be neither dramatic or sudden. Their impact will be historical, not contemporary. They will come if we exercise the kind of wisdom, prolonged effort, and patience that go

along with looking ahead to what the profession and the Association will be ten years or even another thirty-five years from now. (Newell, 1984, p.311)

Newell's vision is that successful change will occur if leaders in athletic training see where the profession is today and envision where the future of the profession needs to go. The leaders of the profession must assess the situation and carefully, methodologically make the changes so that the profession ends up where it should. In Newell's eyes, change will be slow and carefully articulated. Newell also envisioned education to be the building block of the profession and developed the sense of urgency to develop and constantly change athletic training so the profession would be strengthened.

As Ebel went on to say, "Through his advocacy of education he helped to elevate the profession to where its competence and effectiveness of treating and conditioning athletes could not be denied" (p.10). As the profession evolved, Newell continued to establish the urgency to redefine and develop the skills of athletic training so that the profession would win recognition in the healthcare community and create opportunities for employment. Even when Newell resigned his post as executive secretary in 1968, he continued to manifest his leadership in athletic training education. Under Newell's leadership, he helped to develop and define the athletic training curricula. Throughout the years he was successful in adapting education to fit the needs the profession His efforts led to the development the Professional Education Committee, the first four NATA approved undergraduate education programs, and formal recognition by the AMA. "With his customary intensity, he went on to chair the Professional

Advancement Committee in efforts that led to curriculum programs in athletic training and to certification" (Ebel, p.10).

> To accomplish what he felt needed to be done, Newell pushed himself hard, and when others needed a nudge, he was capable of that, too. Otho Davis, himself a past executive director, remembered: 'Pinky would plant the seed and watch others tend to it. But if it wasn't sprouting as fast as he thought it should, he'd put a little fertilizer to it'. (Ebel, 1999, p. 10)

Gary Delforge and Robert Behnke continued to move athletic training education towards its present day state. These two men were able to manifest the leadership to establish athletic training as an academic discipline in American higher education and help to establish formal recognition for the athletic training as an allied health profession.

Education and preparation were crucial in order for the profession to advance. Each leader envisioned advancing the profession more and more. As was quoted in the previous chapter, "With the dissemination of information and education, large numbers of men were drawn to the profession" (Ebel, 1999, p.3). These men shared visions not only to make athletic training a respected profession but also to provide a foundation of knowledge from which to begin educating future professionals. They took actions on these visions and were successful. These men helped to truly establish the athletic training major. By developing *The Guidelines for the Development and Implementation of NATA Approved Undergraduate Athletic Training Programs*, the standards for the athletic training major were established. Furthermore, these men had a vision of where the profession would be in 10 years and made the necessary changes the athletic training

curriculum. These visions and successes opened the door and empowered future professionals to provide the leadership that would drive athletic training from a vocational skill learned through an apprenticeship into a profession that would educate future professionals via an academic discipline. "Each decade brought new leaders who not only had a vision for the future, but who also retained a sense of appreciation for previous accomplishments" (Delforge & Behnke, 1999, p.61). This statement is evidenced in the evolution of athletic training education. Furthermore, it can be applied to the history and evolution of American higher education.

Regarding the nature of change in athletic training education, "We have to make sure we adapt [our education] to the job market. It's not certain where all our jobs are going to be 15 years from now....As the health-care industry changes, we have to be on our guard against complacency and continuing to educate people the way we always have" (McLean as cited in Ebel, 1999, p.82).

Conclusions

Throughout the study of the evolution of American higher education and the evolution of athletic training, I have found that athletic training education, as an academic discipline, is the result of an outgrowth of the history of American higher education. What started out in American higher education as education for the elite class and education that served the needs of the time slowly began to change. As the needs of the time dictated, higher education began to diverge from what was a curriculum deeply rooted in the classics, to one that became more liberal and practical. Colleges and universities would become the setting for formal instruction and preparation for the vocations and professions of life. Concurrently, as intercollegiate athletics became

rooted in the extra-curriculum of higher education, the need arose for an individual who would be responsible for the health care of student-athletes. The need for this support service gave rise to the athletic training vocation. As time passed, the demands of the field changed. The skills of the early athletic training vocation would develop and form a significant knowledge base, which would eventually need grounds for formal training. As the field gained the respect and recognition it deserved, higher education became the formal training ground for the new profession of athletic training.

After reviewing the literature on the history of American higher education and contemporary change theory, the second conclusion that can be drawn from this research is that change theory is deeply rooted in the history of higher education. Just as present day scholars have developed change theories for use in higher education and the business world today, aspects of change theory are evidenced in the evolution of American higher education, as well as the evolution of athletic training education as an academic discipline. In the change processes that were briefly reviewed above, elements of change theory are obvious or can be inferred. In order for the changes to take place a leader needed to be in place. That leader developed a shared vision and presented the sense of urgency to make a change. Needs changed. The way things were being done simply did not work anymore. The leader initiated action and empowered others to participate in the change process. Lastly, for the change to take root and become institutionalized, the leader must show small, early successes so that those who are skeptical can be persuaded. Success also empowers those in other institutions to implement change and potentially build on the successes of others.

The Future of Athletic Training Education

The future for athletic training education in higher education is very promising. With the proliferation of undergraduate and graduate athletic training programs, athletic training education is becoming increasingly popular among college students. Martin and Buxton (1997) discuss the implications of the 21st century college student in regard to athletic training education programs. Martin and Buxton call on higher education institutions and athletic training education programs specifically, to adjust and respond to the changing needs of students. They feel that athletic training education programs need to focus attention and awareness on multicultural issues, flexible scheduling, accelerated degree programs for non-traditional students, and learning experiences that are both practical and tangible. The students of the 21st century will be the athletic trainers of the future and it is necessary that the profession continue to adjust within a dynamic, ever-changing society (Martin & Buxton, 1997, p. 54).

"As athletic training continues to emerge as a distinct entity in health care, doctoral programs designed specifically for ATC's must continue to evolve" (Hertel, West, Buckely, & Denegar, 2001, p. 52). With the continued growth of athletic training education within the realm of higher education, the authors feel there is a need for more doctoral-educated certified athletic trainers to fill the numerous tenure-track faculty positions that are being created. This will not only expand the theoretical and research knowledge base of the profession but will also allow the athletic training profession to affect higher education policy, with a critical mass of doctoral-educated ATC's in senior faculty and administrative positions.

Clinical education of athletic training students is also worthy of mention. Craig Denegar, an athletic training educator is working to improve clinical education for undergraduates. The clinical education of athletic training students has traditionally been in the athletic training rooms of institutions that have athletic training education programs or through internship experiences in college settings. Denegar (1997) stated, "Students often gain little experience outside of the traditional athletic training room" (p.299). For this reason, Denegar feels that with the variety of populations being serviced by certified athletic trainers, there is a need to address the different physical, social, and emotional differences among the different populations. Denegar feels that it is the practical experience that is often most lacking and that students should gain experience with a cross section of physically active people as a part of their education (p.299). Denegar further proposes that new forms of clinical education be developed. "Perhaps a residency model similar to that of medical and physical therapy education is needed" (p. 299). In presenting a challenge for the future, Denegar states "We, as a profession, must provide well-structured and well-supervised clinical education in settings in which new graduates will work. Failing to do so would be a disservice to both student athletic trainers and the physically active population consuming athletic training services" (p.299).

One issue that may impede athletic training education may be state practice acts. State practice acts define where an athletic trainer may practice and who may consume the services that an athletic trainer provides. For example, in the state of New Jersey, the practice act for athletic trainers limits where an athletic trainer may work. In New Jersey, an athletic trainer means "a person who practices athletic training as an employee of a

school, college, university or professional team"(New Jersey Athletic Trainer's Licensure Act, 2001). This does not include a physical therapy clinic or positions in the industrial setting where many athletic trainers are now being employed. Furthermore, the New Jersey Athletic Trainer's Licensure Act (2001) refers to an athlete as, "an individual who participates in an interscholastic, intercollegiate, or intramural athletic activity being conducted by an educational institution licensed in this State or a professional athletic activity." This also does not include those who would consume services in the physical therapy and industrial settings. Although New Jersey is one of the small number of states left that has a practice act of this nature, if practice acts are not changed to incorporate all employment settings, then the limited definitions of practice acts will impede the development of the profession. Today, students are exposed to all areas of employment during clinical education. In New Jersey, it is technically a waste of time to send students to settings that provide restrictions on their learning. Although it is necessary to educate students in these clinical areas because the majority of state practice acts do not provide site restrictions, when these students are in restricted sites, educational value is wasted. It is important that all states adopt similar practice acts so that all clinical education opportunities are beneficial.

Another issue that may impede the growth and development of athletic training education is the conflict between the Education Council and the practicing clinicians. The Education Council was formed to develop and implement reform of athletic training education. Recently, there have been numerous disagreements between the Education Council and practicing clinical educators. The biggest complaint is that the members of the Education Council are making changes in clinical education without consulting

clinical educators themselves for input. If clinical education is to be successful and continue to develop, it is critical that effective communication take place.

These issues are among many that the athletic training profession and athletic training education will deal with in the future. New leaders will emerge who will raise the profession to new levels. Changes will be made to meet the new demands of the profession and these changes will enable and empower future professionals to have a significant impact on the future of their profession.

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